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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,665	02/14/2002	Garrett Andrew Smith		2982

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SINSHEIMER, SCHIEBELHUT, BAGGETT  
1010 PEACH STREET  
SAN LUIS OBISPO, CA 93401

EXAMINER
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CHARLES, MARCUS

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/077,665

**Applicant(s)**

SMITH, GARRETT ANDREW

**Examiner**

Marcus Charles

**Art Unit**

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06-08-2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is responsive to the amendment / argument filed 06-08-2004, which has been entered. Claims 1-12 are currently pending.

#### ***Response to Arguments***

1. Applicant's arguments, filed 06-08-2004, with respect to the rejection(s) of claim(s) 1-12 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dzus (2,511,051) as set forth below.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1, 3, 4, 6, 7, 9, 10 and 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO (9308071) in view of Dzus (2,511,051). WO (9308071) discloses a fastener assembly (107,109) for attaching a chainring to a bicycle, the device comprising a nut (107) comprising an internally threaded cylinder, an external flange (not labeled) on one end and a hole in the cylinder; a bolt (109) threadably engages the nut and comprising a tool interface (not labeled) formed inside the shaft. WO (9308071) does not disclose a tool interface means formed inside the cylinders. Dzus discloses a fastener system (10, 11) comprising a nut (11) having a threaded cylinder (16) with internal threads (18)

Art Unit: 3682

and a tool interface means (19) formed in the cylinder, the bolt (10) having a external threaded cylinder (12/14) with a tool interface (15) inside the cylinder in order to facilitate proper alignment between the bolt and nut thus minimizing cross-threading before tighten fastening the device and to allow quick and easy removal without the bolt and nut turning in unison. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fastening device of WO (9308071) so that the nut and bolt, each has a tool interface in the threaded cylinders in view of Dzus in order to facilitate proper alignment between the bolt and nut thus minimizing cross-threading before tighten the fastening device and to allow quick release and by fastening/turning the bolt and nut simultaneously and to allow quick and easy removal without the bolt and nut turning in unison.

Regarding claims 3, 6 and 9, note the tool interfaces (15 and 19) of Dzus device have different sizes.

In claim 10, not the tool interface of the nut faces the out side of the crank handle.

4. Claims 2, 5 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over WO (9308071) in view of Dzus. WO (9308071) and Dzus do disclose that the tool interface means in the nut and bolt have the same size. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fastening device of WO (9308071) in view of Dzus so that the tool interfaces are of same size, since such a modification would have been a matter of design choice, and such a modification would involve a mere change in weight

and cost of manufacturing. A change in size is generally recognized as being within the level of ordinary skill in the art. In *Rose*, 105 USPQ 237 (CCPA 1955)

5. Claims 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO (9308071) in view of *Kirrish*. WO (9308071) in view of *Kirrish* do not disclose the nut tool interface means faces the outside of the crank handle. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fastening device of WO (9308071) so that the tool interface means faces the outside of the crank handle, since this involves rearranging the nut and bolt to face a different direction and it has been held that rearranging parts of an invention involves only routine skill in the art. In re *Japikse*, 86 USPQ 70.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Pratt* (6,261,042) discloses a nut having a cylindrical shaft with an internal threaded hole and a tool interface. *Kemper* (2,424,212) discloses a nut having a cylindrical shaft comprising an external threaded shaft and a tool interface in the threaded shaft.

Art Unit: 3682

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (703) 305-6877. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Marcus Charles  
Primary Examiner  
Art Unit 3682  
July 25, 2004